

S/137/61/000/006/060/092  
A006/A101

AUTHORS: Vorontsov, G.A., Baraboshkin, V.V.

TITLE: Aluminum alloys for crane metal structures

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 41, abstract 6E282  
("Tr. Vses. n.-i. in-ta pod'yemnostransp. mashinost.", 1960, no. 3,  
125 - 218)

TEXT: The authors present characteristics of main domestic Al alloys for welded and riveted structures and analyze problems of planning, production technology and economy. The total labor consumption of manufacturing 1 ton Al-structures is by 2.15 times higher, and the cost by 3.25 times higher than corresponding data for steel structures, although for Al structures mainly semi-automatic arc welding and for steel structures manual welding is employed. The ratio of the total cost of an Al crane to that of a steel crane is 1.11. It is noted that the planning of Al cranes should be made by taking into account reduced Al costs. The authors present recommendations as to the selection of equipment and conditions of arc-cutting of Al and its alloys. The selection of conditions, prepara- ✓

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Aluminum alloys for crane metal structure

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tion of edges and equipment for argon-arc welding is discussed in detail. Tables and schematic drawings are given. The information includes recommendations on resistance and  $C_2H_2-O_2$  welding and data on the absolute and relative strength of welded joints.

Ye. Terpugov

[Abstracter's note: Complete translation]

Card 2/2

KUDRYAVTSEV, N.T.; TYUTINA, K.M.; BARABOSHINA, N.K.

Electrodeposition of the alloy tin-bismuth. Trudy MKHTI no.26:113-  
119 '59. (MIRA 13:9)

(Tin-bismuth alloys)

S/020/60/132/03/41/066  
B004/B007

5.1300  
AUTHORS: Kudryavtsev, N. T., Golovchanskaya, R. G., Baraboshkina, N. E.  
TITLE: The Cathodic Process in the Electrolytic Depositing<sup>18</sup> of  
Titanium From Aqueous Solutions  
PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 3,  
pp. 636-638

TEXT: By way of introduction, the authors discuss the data given in publications on the cathodic depositing of titanium and, from the position of Ti between Al and Mn in the electrochemical series, they draw the conclusion that it must be possible to deposit it like Al from non-aqueous organic or aqueous solutions of its salt in the case of high hydrogen overvoltage. They investigated the electrolysis of alkaline solutions, for which purpose they used solutions of the metatitanates of Na, Mn, Cr, and Fe in NaOH. The low solubility of these metatitanates (6 - 8 g/l Ti) in NaOH may be increased by means of organic additions. The maximum titanium content of the solution (15 - 20 g/l) was obtained by leaching-out the sodium metatitanate with 20-30% NaOH at 50°C with the addition of organic

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The Cathodic Process in the Electrolytic  
Depositing of Titanium From Aqueous Solutions

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B004/B007

substances. Titanium is found as  $Ti^{4+}$  in the solution. As cathode, Cu, brass, Pt, and Pb, and as anode, stainless steel or Pt were used. The current yield was determined gasometrically (by measuring the deposited hydrogen) and gravimetrically (by measuring the deposited titanium). As shown in Fig. 1, the current yield decreases irrespective of the type of the cathode within 20-30 min from 60 to 0.5%. As soon as the cathode is completely covered with Ti, only hydrogen is deposited. The titanium layer on the cathode is 3-4  $\mu$  thick. When an anode made from stainless steel is used, the titanium deposit contains traces of Fe and Cr, and attains a thickness of 15  $\mu$ . As acid electrolytes, solutions of potassium fluoride were used, which were acidified with hydrofluoboric acid. There is no deposit of Ti on the cathode from compounds of  $Ti^{4+}$ . Only hydrogen is deposited, and  $Ti^{4+}$  is completely reduced to  $Ti^{3+}$ . Only after the ratio  $Ti^{4+} : Ti^{3+} = 1 : 1$  has been attained in the solution, does the cathodic depositing of titanium metal begin. No formation of  $Ti^{2+}$  in the solution was observed. Also in this case the current yield decreases (Fig. 2) as soon as the cathode is covered with Ti (3-4  $\mu$ ), but not to the same extent as in alkaline electrolytes, because the titanium deposited from acid electrolytes is more porous. The addition of surface-active substances

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The Cathodic Process in the Electrolytic  
Depositing of Titanium From Aqueous Solutions

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B004/B007

(gelatin, joiner's glue, glycocoll) does not influence the current yield.  
There are 2 figures and 15 references: 2 Soviet, 6 English, 3 German, and  
4 Japanese.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im.  
D. I. Mendeleyeva (Moscow Institute of Chemical Technology  
imeni D. I. Mendeleyev)

PRESENTED: December 12, 1959, by A. N. Frumkin, Academician

SUBMITTED: December 12, 1959

Card 3/3

BARABOY, T.A.

Oxidation-reduction processes in the intestines of newborn infants.  
Vop.okh.mat. i det. 1 no.3:33-36 My-Je '56. (MIRA 9:9)

1. Iz Novo-Kakhovskogo lechebnogo ob'yedineniya (glavnyy vrach  
D.A.Krivosos, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR  
prof. Ye.N.Khokhol)  
(INFANTS (NEWBORN)) (INTESTINES)  
(OXIDATION-REDUCTION REACTION)

**"APPROVED FOR RELEASE: 06/09/2000**

**CIA-RDP86-00513R000103420014-6**

**APPROVED FOR RELEASE: 06/09/2000**

**CIA-RDP86-00513R000103420014-6"**



BARABOY, V. A.

AID P - 2462

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 9/18

Author : Baraboy, <sup>V. A.</sup> Sanitary Inspector

Title : Experience in work of a regional medical and epidemiological station on virgin land.

Periodical : Gig. i san., 6, 45-47, Je 1955

Abstract : Discusses problems of sanitation in the new collective and state farms organized in 1954 on virgin land in one of the most remote districts of the Akmolinsk Province. Recommends hygienic measures for construction projects in North Kazakhstan, planned for 1955, which will ensure water supply, better houses, healthy living conditions, as well as medical care for agricultural workers on virgin land and their families.

Institution: Medical and Epidemiological Station of the Esil'skiy District, Akmolinsk Province.

Submitted : Dec. 20, 1954

BARABOY, V.A. (Aknolinsk)

~~Raising~~ medical services on virgin lands to the level of modern standards. Sov.sdrav. 15 no.6:17-21 N-D '56. (MLRA 10:1)

1. Oblastnaya sanitarno-epidemiologicheskaya stantsiya.  
(PUBLIC HEALTH  
in Russia, med. serv. in virgin soil areas)

BARABOY, V. A., Cand Med Sci -- (diss) "Sanitary-Hygienic Characteristics of New Dwellings on Virgin Soils (under Conditions of Northern Kazakhstan)." Omsk, 1957. 13 pp (Omsk State Med Inst im M. I. Kalinin), 200 copies (KL, 50-57, 120)

- 30 -

BARABOY, V.A.

Hygienic features of prefabricated wooden houses and portable field-type dwellings in the virgin lands of Akmolinsk Province. Zdrav.Kazakh. 17 no.6:13-17 '57. (MIRA 12:6)

1. Iz Kazakhskogo instituta epidemiologii, mikrobiologii i gigiyeny i Akmolinskoy obl'sanepidstantsii.  
(AKMOLINSK PROVINCE--HOUSING, RURAL)  
(DWELLINGS--HEATING AND VENTILATION)

EXCERPTA MEDICA Sec 17 Vol 5/3 Public Health Mar 59

1068. SANITARY AND HYGIENIC CHARACTERISTICS OF NEW HOMES BUILT FROM LOCAL BUILDING MATERIALS ON VIRGIN SOIL (Russian text) - Baraboy V. A. - GIG.I.SAN. 1958, 6 (20-25)

The extensive cultivation of virgin land has led to a great increase in house-building. During 1954-1957, in addition to the use of prefabricated wooden houses, houses were built with local materials (mud-bricks, reeds, etc.). The author examined the new saman (mud-brick) houses, and found that they provide a satisfactory microclimate through all seasons. Houses built of pressed and unpressed reeds proved to be unsatisfactory, as they were highly penetrable to air. The author considers that saman should be used more widely as a building material for dwellings on virgin land in Northern Kazakhstan and other regions with a similar climate. The construction of the reed houses should be improved.

BARABOY, V.A.

~~Problem of improvement of public health supervision in the country.~~  
Gig. 1 san. 23 no.9:42-46 S '58 (MIRA 11:11)

1. Glavnyy vrach Akmolinskoy oblastnoy sanitarno-epidemiologicheskoy  
stantsii.

(PUBLIC HEALTH  
in Russia (Rus))

BARABOY, V.A.

Present state of the problem of photoreactivation in lesions produced in living organisms by short-wave ultraviolet rays. Fiziol. zhur. [Ukr.] 5 no.5:680-688 S-Q '59 (MIRA 13:3)

1. Institut fiziologii im. A.A. Bogomol'tsa AN USSR, laboratoriya biofiziki.

(ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)  
(PHOTOTHERAPY)

27.2400

28697

S/021/60/000/012/005/006  
D251/D302

AUTHORS: Horodets'kyi, O.A., Corresponding Member  
AS UkrSSR, Baraboy, V.A., and Chernets'kyi, V.P.

TITLE: The therapeutic action of gallic acid derivatives  
in acute radiation sickness

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi,  
No. 12, 1960, 1635-1637

TEXT: The authors state the two effects of radiation on proteins and nucleic acids: The indirect effect is the changes in structure and function caused by free-radical reactions following the radiolysis of water, and the direct action is the excitation of the molecules by radiation into a metastable state. The inhibition of these reactions may, therefore, have great significance in preventing and treating radiation sickness. The authors used propyl gallate and sodium gallate as inhibitors. An experiment was carried out on 360 white mice of weight  
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D251/D302

The therapeutic action ...

19-23 gr, subjected to a minimum lethal dose of radiation (600r), and various tests were carried out to determine the effectiveness of the gallates in preventing and curing radiation sickness. It was found that they are effective as a means of preventing radiation sickness, and also of curing it, provided that they are given in large doses immediately after irradiation. In the case of a dose of 300 mg per 1 kg of sodium gallate, the survival rate is claimed to be almost 50%. If gallates are applied at longer intervals (1 hour) after irradiation, the effect is considerably less. /-Abstractor's note: It is difficult to understand how the gallates are applied, since it says merely e.g. "gallate of estimated 100 mg per 1 kg weight" / There are 2 tables and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Instytut fiziologii im. A.A. Bohomol'tsa;  
(Institute of Physiology im. A.A. Bohomolets);  
Instytut orhanichnoyi khimiyi AN URSR (Institute  
of Organic Chemistry AS UkrSSR)

SUBMITTED: July 15, 1960  
Card 2/2

27.12.20

22365  
S/029/61/000/006/001/004  
D045/D112

AUTHOR: Baraboy, V., Candidate of Medical Sciences (Kiyev)  
TITLE: Rays against rays  
PERIODICAL: Tekhnika molodezhi, no. 6, 1961, 5-7

TEXT: This article, which is intended for the general reader, is concerned with the effect of the sun's rays. The author points out how beneficial the sun's rays are to living organisms when applied in small quantities and how deleterious they are when applied in large quantities over a long period. The invisible rays contained in the solar spectrum are of two types - infrared thermal rays and ultraviolet rays. The latter radiate little heat but develop photochemical reactions, such as oxidation, reduction and decomposition in irradiated tissues. Ultraviolet rays can decompose albumins and other organic substances into their constituents such as polypeptides and amino acids and can convert ergosterol into vitamin D. Ultraviolet rays are heterogeneous. Some of them can cause erythema and can destroy microbes, some, when effective over an extended period, may cause dermal cancer and others may intensify the formation of or decompose vitamin D. Only a small,

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D045/D112

Rays against rays

longwave part of these ultraviolet rays reaches the Earth, the bulk of them being absorbed or dispersed in the atmosphere. With the aid of rockets and satellites launched into the dense layers of the atmosphere, scientists are studying the peculiarities of this part of the spectrum. Investigations proved that the part of the spectral region absorbed by the air had a greater chemical and biological effect than that which reaches the Earth's surface. Fortunately, these rays possess very little capacity for penetration and may be absorbed by any protective layer coming into contact with them, e.g. the Earth's atmosphere. These rays, therefore, are much less of a menace to future astronauts than cosmic rays. Briefly describing the difference between rays in different parts of the solar spectrum, the author says that infrared rays possess very low energy quanta and that they only slightly loosen the atoms and molecules of the irradiated body on impact, thus increasing the oscillation amplitude. The resulting thermal reaction depends on the mean oscillation energy of the body's molecules. In the presence of photosensitizers such as chlorophyll, the infrared rays will have sufficient energy to effect some chemical reactions. The ultraviolet rays, with their high energy quanta, need not have intermediary agents in order to produce a chemical reaction. A cell, when exposed to the effect of irreversible

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Rays against rays

photochemical displacement, may acquire new properties. It may grow rapidly and multiply or even be changed into a cancer tumor. Calculation shows that a molecule when absorbing a quantum of ultraviolet rays of nearly 0.25 micron wavelength acquires an energy corresponding to the mean energy of a thermal movement at 38,000°C. Simple means of fighting the destructive effect of ultraviolet rays were discovered in 1949 by the Soviet scientist Ivan Fedorovich Kovalev of the Institut glaznykh bolezney imeni V.P. Filatova (Ophthalmic Institute im. V.P. Filatov) in Odessa and simultaneously by the American, Albert Kelner. They discovered the phenomenon of photoreactivation, i.e. that the deleterious effect of ultraviolet rays on living organisms can be considerably reduced by immediate illumination of the irradiated body by solar rays. A general law has been established governing the effect of photoreactivation upon matter and living organisms. The problem of clarifying the complicated process of the internal molecular and intermolecular transformations occurring due to the absorption of radiant energy has to be solved. This may lead to the discovery of methods of using photoreactivation against radiation sickness. X-rays, and gamma rays emitted during radioactive disintegration, have a shorter wavelength than ultraviolet rays. Their quanta have a highly destructive energy and, when falling on molecules

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Rays against rays

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D045/D112

of proteins and other elements of a living cell, they destroy these molecules and even pierce the organism itself. The author, in summing up, states that if the law of reversibility valid for light-sensitive materials is equally valid for living organisms, rays of a longer wavelength than x-rays should apparently be able to reduce the destructive activity of the latter. As an example, a living cell, when attacked by x-rays, may recover its vital activity under the effect of visible light. Klimentiy Arkad'yevich Timiryazev's description of how a ray of sunlight started life on earth is quoted. There are 5 figures.

Card 4/4

GORODETSKIY, A.A. [Horodets'kiy, O.A.]; BARABOY, V.A.; CHERNETSKIY, V.P.  
[Chernets'kiy, V.P.]

Protective action of certain inhibitors of chain oxidative  
processes in acute radiation sickness. Dop. AN URSR no. 6:812-  
815 '61. (MJRA 14:6)

1. Institut fiziologii im. A.A. Bogomol'tsa i Institut  
organicheskoy khimii AN USSR. 2. Chlen-korrespondent  
AN USSR (for Gorodetskiy).  
(RADIATION PROTECTION)  
(GALLIC ACID)

30369

27.2400

S/205/61/001/005/005/005  
D299/D304

AUTHORS: A.A. Gorodetskiy, V.A. Baraboy, and V.P. Chernetskiy

TITLE: The protective action of certain inhibitors of chain oxidation processes with acute radiation sickness

PERIODICAL: Radiobiologiya, v. 1, no. 4, 1961, 781 - 788

TEXT: One of the most promising ways of counteracting radiation afflictions is to break the chain reaction in one of its initial links. If modern conceptions of the mechanism of protective action are true, compounds capable of fixing active radicals and of lowering the tissues' redox potential will prove to be effective agents in the prophylaxis and treatment of radiation sickness. This applies especially to the group of inhibitors of chain oxidation processes, but the authors could find no published data on the advisability of using these preparations in cases of radiation sickness. Experiments were conducted with white mice and white rats injected intraabdominally with propyl gallate ( a 0.75% solution in a phosphate buffer) 30 min before irradiation. Ir-

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D299/D304

The protective action of ...

radiation was effected with an PYM-3 (RUM-3) and an PYM-11 (RUM-11) apparatus at intensities of 24.5 and 25.4 r/min. The mice were given a dose of 600 r and the rats a dose of 750 r. In its most effective dose of 60 mg/kg of body weight, propyl gallate increased the survival rate of the irradiated animals and extended the average life span of the irradiated mice to 19.6 days ( 8.8 days in the control series ). The injection of propyl gallate also postponed the period of the height of clinical symptoms of acute radiation sickness from 6 - 10th day to 9 - 15th day after irradiation. A polarographic study was made of the action of propyl gallate on the activity of the blood serum proteins, especially the activity of the SH-groups. The inhibitor effect of propyl gallate was expressed in a sharp drop in the activity of the serum proteins' SH-groups which gave them a certain measure of protection against the destructive action of radiation. This also accounted for the more rapid restoration of this activity only 1 - 2 days after irradiation. The author then describes tests conducted with other inhibitors such as: gallic acid, methyl gallate, butyl gallate and sodium gallate. The comparative efficacy of these preparations can be seen from the following table:

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D299/D304

The protective action of ...

Preparation	No. of mice	No. of survivors	% of survivors	Mean life span (days)
Gallic acid	30	9	30.0	16.5
Methyl gallate	30	7	23.3	15.1
Propyl gallate	260	112	43.1	19.6
Butyl gallate	30	15	50.0	21.0
Sodium gallate	30	14	47.0	25.0
Control	100	2	2.0	8.8

The table shows that sodium gallate, propyl gallate and butyl gallate

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The protective action of ...

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D299/D304

are most promising anti-radiation preparations. There are 5 figures, 1 table and 24 references: 9 Soviet-bloc and 15 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: A.M. Siddiqi, A.L. Tappel, Arch. Biochem. and Biophys., 60, 91, 1956; A.L. Tappel, Food Res., 18, 560, 1953; Th.H. Pritchard, Inds Parfum., 9, 2, 51, 1954; D.B. Johnston, M.W. Foote, W.I. Rogers, J.E. Little, Antibiot. and Chemotherapy, 3, 183, 1953

ASSOCIATION: Institut fiziologii im. A.A. Bogomol'tsa (Institute of Physiology im. A.A. Bogomolets), Kiyev

SUBMITTED: January 7, 1961

Card 4/4

GORODETSKIY, A.A.; BARABOY, V.A.; CHERNETSKIY, V.P.

Protective effect of some inhibitors of chain oxidation processes  
during acute radiation sickness. Radiobiologiya 1 no.5:781-788 '61.  
(MIRA 14:11)

1. Institut fiziologii imeni A.A.Bogomol'tsa, Kiyev.  
(RADIATION PROTECTION) (GALLIC ACID)

BARABOY, V.A.

Physicochemical foundations of the biological action of ultraviolet rays. Fiziol. zhur. [Ukr.] 7 no.4:553-562 Jl-Ag '61. (MIRA 14:7)

1. Laboratoriya biofiziki Instituta fiziologii im. A.A.Bogomol'tsa AN USSR, Kiyev.

(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

GORODETSKIY, A.A. [Horodets'kyi, A.A.]; BARABOY, V.A.

Chemoprophylaxis and chemotherapy of experimental acute radiation sickness. Fiziol. zhur. [Ukr.] 7 no.5:617-625 S-0 '61.

(MIRA 14:9)

1. Laboratory of Biophysics of the A.A.Bogomoletz Institute of Physiology of the Academy of Sciences of the Ukrainian S.S.R., Kiev.

(RADIATION SICKNESS)

(GALLIC ACID)

BARABOY, V.A., kand.med.nauk

Photoreactivation (the problem of the antagonism between radiations of different wave lengths); a survey of the literature. Gig.i san. 26 no.3:72-81.Mr '61. (MIRA 14:7)

1. Iz laboratorii biofiziki Instituta fiziologii imeni A.A. Bogomol'tsa Akademii nauk USSR.  
(ULTRAVIOLET RAYS)

BARABOY, V.<sup>A</sup>, kand.meditsinskikh nauk (Kiyev)

Radiation which counteracts radiation. Tekh.mol. 29 no.6:5-7  
'61.

(MIRA 14:7)

(Radiation--Physiological effect)

GORODETSKIY, A.A.; BARABOY, V.A. (Kiyev)

Effect of ascorbic acid on the protective and therapeutic  
action of gallates in acute radiation sickness. Vrach. delo  
no.2:96-98 F '62. (MIRA 15:3)

1. Laboratoriya biofiziki instituta fiziologii imeni A.A.  
Bogomol'tsa AN USSR.

(GALLATES) (ASCORBIC ACID) (RADIATION SICKNESS)



GORODETSKIY, O. [Horodets'kyi, O.]; BARABOY, V., kand.med.nauk

Rays and life. Znan.ta pratsia no.9:14-15 S '62. (MIRA 15:11)

1. Chlen-korrespondent AN UkrSSR (for Gorodetskiy).  
(Radiobiology)

KIRICHINSKIY, B.R. [Kyrychyns'kyi, B.R.]; BARABOY, V.A.

Characteristics of the biological effect of ionizing radiation and  
ultraviolet rays during their combined use. Fiziol. zhur. [ukr.] 8  
no.5:574-580 S-O '62. (MIRA 17:11)

1. Laboratoriya of Biophysics of the A.A. Bogomol'ets Institute of  
Physiology of the Academy of Sciences of the UkrSSR, Kiyev.

BARABOY, V.A. (Kiyev)

Galvanoadrenaline and dionine tests in different physiological  
states of an organism. Vop.kur., fizioter. i lech. fiz.kul't.  
27 no.4:339-343 J1-Ag'62 (MIRA 16:11)

\*

BARABOY, V.A.; BERSHTEYN, S.A.

Polarographic activity of serum proteins in acute radiation sickness  
and the preventive administration of propyl gallate. Ukr.biochim.  
zhur. 34 no.1:32-39 '62. (MIRA 17:5)

1. Laboratory of biophysics of the Institute of Physiology of the  
Academy of Sciences of the Ukrainian S.S.R., Kiev.

LIPKAN, M.F.; BARABOY, V.A.; LUKASHOVA, R.G. [Lukashova, R.H.]

Changes in the amount of nucleic acids in the organs of rats under the influence of X irradiation and the prophylactic action of propyl gallate. Ukr. biokhim. zhur. 34 no.2:167-175 '62. (MIRA 16:11)

1. Laboratoriya biofiziki Instituta fiziologii im. A.A. Bogomol'tsa AN UkrSSR i kafedra radiologii Instituta usovershenstvovaniya vrachey, Kiyev.

\*

27.1220

S/221/62/053/003/001/001  
1015/1215

AUTHOR: Baraboy, V. A. (Kiev)

TITLE: Biological effects of ultraviolet rays

PERIODICAL: Uspekhi sovremennoy biologii, v. 53, no. 3, 1962, 265-288

TEXT: This extensive review article deals with the following aspects of UV radiation: the physico-chemical basis of the biological effect of UV rays; erythema and pigmentation caused by UV; effect of UV-insufficiency (light starvation); the bactericidal effect of UV; the UV chemoluminescence of biological structures. There are 3 tables and 207 references.

✓B

Card 1/1

BARABOY, V.A. (Kiyev)

Biological effects of ultraviolet rays. Usp.sovr.biol. 53 no.3:  
265-288 My-Je '62. (MIRA 15:9)  
(ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)

PHASE I BOOK EXPLOITATION

SOV/6550

Gorodetskiy, A. A., and V. A. Baraboy

Protivoluchevyye svoystva gallatov; eksperimental'noye issledovaniye  
(Antiradiation Properties of Gallates; an Experimental Study)  
Kiev, Izd-vo AN USSR, 1963. 125 p. 2000 copies printed.

Ed.: A. A. Gorodetskiy, Corresponding Member, Academy of Sciences  
UkrSSR, Professor; Ed.: Z. B. Yankovskaya; Tech. Ed.: A. M. Lisovets.

PURPOSE: The book is intended for radiobiologists and other specialists in  
medicine who are working on radiation protection problems.

COVERAGE: The monograph summarizes the original research carried out by the  
authors and includes data on the therapeutic properties, pharmacology, and  
toxicology of gallates. It has been established that injection of gallates  
into the test animals prior to their exposure to LD of radiation insures  
50% survival. The most important properties of gallates consist in their  
ability to significantly reduce radiation effects in the organism even  
after their application during 2 — 4 hours following irradiation. There  
are 348 references, mostly non-Soviet.

Card ~~1~~ 3



ACCESSION NR AM1040367

BOOK EXPLOITATION

S/

Baraboy, Vilen Abramovich; Kirichinskiy, Boris Romanovich

Nuclear radiation in biology (Yaderny\*ye izlucheniya v biologii), Izd-vo AN SSSR, 1963, 131 p. illus., biblio. 6,670 copies printed. Series note: Akademiya nauk Ukrainskoy SSR. Nauchno-populyarnaya literatura.

TOPIC TAGS: biology, medicine, nuclear radiation, agriculture

PURPOSE AND COVERAGE: The book is devoted to one of the vital, intensively developing questions of modern biology -- the effect of ionizing radiation on living organisms. It is a popular treatment of the problems of nuclear radiation and its features, the effects of radiation on living organisms, its aftereffects, protection against harmful radiation, and ways of using the energy of radiation in biology, medicine, and agriculture. The book has been written with consideration of the most recent achievements of domestic and foreign science in this area and it covers the problems of Soviet, particularly Ukrainian radiologists-scientists. The complex problems of radiobiology are handled in simple, popular language and are comprehensible to the mass reader.

Card: 1/2

ACCESSION NR AM4040367

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SUB CODE: LS

SUBMITTED: 28Dec63

NR REF SOV: 015

OTHER: 002

DATE ACQ: 30Apr64

Card 2/2

BARABOY, V.A.; CHEBOTAREV, Ye.Ye.

Bicillin-3 in the treatment of experimental acute radiation sickness. Vrach.delo no.2:97-101 F '63. (MIRA 16:5)

1. Otdel biofiziki (zav. - chlen-korrespondent AN UkrSSR, prof. A.A. Gorodetskiy) Instituta fiziologii imeni A.A. Bogomol'tsa AN UkrSSR.

(RADIATION SICKNESS) (PENICILLIN)

L 16607-63

Pb-4 A/AR/K

EW(m)/BDS/ES(a)/ES(j)/ES(c)/ES(k)

AFTTC/AMD/ASD/AFMDC/APGC  
S/238/63/009/002/001/003

AUTHORS: Horodets'kyi, O. O. and Baraboy, V. A.

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TITLE: Prevention and treatment of acute radiation sickness in dogs by means  
of sodium gallate

PERIODICAL: Fiziologichnyy zhurnal Akademii nauk UkrSSR, v. 9, No. 2, 1963,  
240-244.

TEXT: The problem was generated by the possibility of using gallates to prevent the reaction to radiation after-effects with the additional advantage of their low toxicity. It was shown in experiments on 17 dogs that the intravenous administration of 60 mg/kg of body weight of sodium gallate solution before and 200 and 300 mg/kg of body weight directly after exposure to as much as 600 r dose of radiation weakens substantially the seriousness of radiation sickness. Such dose aids the survival of about half of the experimental animals and prolongs the life of those animals which die by 6-10 days. This confirms the data of previous investigators in experiments with small animals, it is proposed to clinically test sodium gallate as an antiradiation sickness drug.

ASSOCIATION: Laboratoriya biofiziki Instytutu fiziologii im. N. S. Bohomoletsya  
Akademii nauk URSR, (Biophysics Laboratory of the Physiology Institute  
im. N. S. Bohomolets, Academy of Sciences of the Ukrainiskaya SSR), Kiev

SUBMITTED: September 3, 1962

Card 1/1

BARABOY, V.A.; MATSUY, S.F., studentak

Effect of sodium gallate on the nucleic acid content of the  
organs of healthy and irradiated rats. Ukr. biokhim. zhur.  
35 no.1:84-91 '63 (MIRA 17:5)

1. Biophysics laboratory of the A.A. Bogomolets Institute of  
Physiology of the Academy of Sciences of the Ukrainian S.S.R.,  
Kiyev.

BARABOY, V.A.; YUKOVA, G.S.

Mutagenic and antimutagenic action of sodium gallate. Dokl.  
AN SSSR 153 no.5:1193-1194 D '63. (MIRA 17:1)

1. Predstavleno akademikom A.V. Palladinym.

ACCESSION NR: AP4011414

S/0238/64/010/001/0089/0093

AUTHOR: Baraboy, V. A.

TITLE: Antiradiation effect of gallates under radiation conditions with a dose of 1000 roentgens

SOURCE: Fiziologichnyy zhurnal, v. 10, no. 1, 1964, 89-93

TOPIC TAGS: antiradiation drugs, antiradiation effects, gallates, sodium gallate, butyl gallate, propyl gallate, cysteamine chlorohydrate, minimum absolute lethal radiation dose

ABSTRACT: The efficacy of administration of butyl, propyl, and sodium gallates, and cysteamine chlorohydrate before and after irradiation of mice with a dose of 1000 roentgens was studied. The preparations were administered intraperitoneally in a 0.2 ml phosphate M/15 buffer solution with 7.2 pH. The control group of mice was administered a similar quantity of solution alone. Cysteamine chlorohydrate was used as a standard, which was synthesized in the Radiobiological Laboratory of the Military Medical Academy imeni S. M. Kirov by P. Yu. Rachins'ky. Propyl gallate was injected before irradiation in doses of 60 and 150 mg per kg of body weight of mice weighing 19-22 grams, butyl gallate -- 60 mg/kg; sodium gallate -- 60 and

Card 1/2

ACCESSION NR: AP4011414

300 mg/kg; cysteamine hydrochlorate -- 150 mg/kg. The average lifetime of mice irradiated with a dose of 1000 roentgens, which is  $5.6 \pm 0.21$  days for the control group, increases with propyl gallate (150 mg/kg) and sodium gallate (60 mg/kg) by 2.0-3.5 days, i.e. about 1.3-1.7 times longer than the control. Butyl gallate was completely ineffective at the 1000 roentgen dose. Upon administering these same preparations immediately after irradiation the lifetime of the mice increased on the average of 2.4-2.6 days, i.e. about 1.5 times longer the control group with propyl gallate (60 mg/kg) and sodium gallate (60 mg/kg). The effect of butyl gallate is statistically unreliable. Post-radiation injection of cysteamine chlorohydrate (150 mg/kg) has no antiradiation effect under the experimental conditions used.

ASSOCIATION: Laboratoriya biofizyky\* Instytut fiziologiyi im. O. O. Bogomol'tsya  
Akademiya nauk URSS, Kiev (Laboratory of Biophysics, Institute of Physiology,  
Academy of Sciences, URSS)

SUBMITTED: 07Nov62

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: LS

NO REF SOV: 004

OTHER: 002

Card 2/2



BARABOY, V.A. (Kiyev)

Present concepts of the mechanisms of the radiation protection  
effect. Usp. sovr. biol. 58 no. 1:52-73 JI-Ag '64.  
(MIRA 17:12)

BARABOY, V.A.; MEDOVAR, B.Ya.

Antiradiation and antioxidation properties of some polyphenols.  
Ukr. biokhim. zhur. 35 no.6:924-930 '63. (MIRA 18:7)

1. Laboratoriya biofiziki Instituta fiziologii im. A.A.Bogomol'tsa  
AN UkrSSR i laboratoriya biokhimii Kiyevskogo meditsinskogo in-  
stituta.

BARABOY, V.A.

Necessity and chance in the living nature. Fiziol. zhur. [Ukr.] 10  
no.3:384-389 My-Je '64. (MIRA 18:9)

1. Institut fiziologii im. Bogomol'tsa AN UkrSSR, Kiyev.

BARABOY, V.A.

Effect of sodium gallate and some other polyphenols on the sugar level in the blood of intact and irradiated rabbits. Ukr. biokhim. zhur. 37 no.4:579-588 '65. (MIRA 18:9)

1. Institut fiziologii im. A.A.Bogomol'tsa AN UkrSSR, Kiyev.

BARABOY, V R.

27.2400

S/021/61/000/006/009/009.  
D247/D301

AUTHORS: Gorodets'kyi, O.A., Corresponding Member AS UkrSSR,  
Baraboyi, V.R., and Chernets'kyi, V.P.

TITLE: Protective effect<sup>19</sup> of some inhibitors of chain oxida-  
tion processes in acute radiation illness

PERIODICAL: Akademiya nauk, Ukrayins'koyi RSR. Dopovid, no. 6,  
1961, 812 - 815

TEXT: This experimental investigation was based on the assumption that the destructive processes in living tissues caused by penetrating radiation are similar to those caused by cancer. The authors injected propyl gallate into the peritoneum of albino mice as a 75 % solution in a phosphate buffer [Abstractor's note: Quantities not given]. The irradiation was carried out with the RVM apparatus as follows: 180 kW, 10 mA, distance 40 cm, with 0.5 cu and 1,0A1 filters, dose intensity 24.5 r/sec, the smallest lethal dose 600 r. 920 mice and 145 rats were tested: The mortality of control ani-

Card 1/4

Protective effect of some ...

S/021/61/000/006/009/009  
D247/D301

mals (not subjected to propyl gallate injections) equalled 98 % of mice and 100 % of rats. Propyl gallate was injected 30 minutes before irradiation. After 30 days, in cases where optimal doses of -this compound were used [Abstractor's note: Amounts not given], 43 % of irradiated animals were alive, their amount in different experiments varying from 32 to 50 %: in these series 260 mice were injected and 100 served as control ones. The projective effect of propyl gallate treatment was shown by the average mouse life-span of 8.8 days for control animals and 20 days for the injected ones, symptoms of acute radiation illness appearing after 6-10 days in the first group and after 9-15 days in the second group. The mortality during the first 10-15 days in both groups was the result of acute radiation illness; later - after 16-30 days - death of the injected animals was due mostly to secondary injections: hysteresis, pneumonia and intestinal worms, invasion; sometimes these infections were found in animals which survived. In the authors' opinion, a combined therapy with antibiotics could save a greater number of animals. As stated previously, the general amount of nu-

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25168

Protective effect of some ...

S/021/61/000/006/009/009.,  
D247/D301

cleic acids in liver, spleen, mucous intestine membranes and especially in testicles of treated animals was diminished mostly in rapport to RNC' (observed on the 3rd day). During the study of sulfhydryde and bisulfide activity in the protein groups of blood serum by polarographic analysis, its marked decrease was observed immediately after irradiation, and it was more pronounced in protected animals than in control animals. After 24 hours, however, this activity began to recover. The recovery of the protected animals was much greater than that of the control ones, full recovery being observed in the surviving animals after 16-30 days. Propyl gallate probably protects the active groups of blood serum and speeds their recovery. By comparing the protective effects of propyl gallate and cysteine it was found that they act similarly: 45% of animals survived when these compounds were injected separately into different animals or together into the same ones. The inhibiting effect of gallates depends on the presence of 3 hydroxyls in their rings and their biological effect depends also on their solubility in the body liquids, their velocity of diffusion through

Card 3/4

Protective effect of some ...

S/021/61/000/006/009/009  
D247/D301

cell membranes etc., all these properties depending on chemical groups attached to the carboxyl group. The author investigated prohibitive properties of gallic acid and of some of its derivatives: the results are tabulated. They found that esters with longest alcohol chains are the most effective ones. Sodium gallate, on account of its high solubility is very effective for it may be quickly absorbed in the bodies of even large animals. In view of the obtained results gallic acid and its derivatives may be regarded as a new group of protective anti-radiation compounds and worthy of further study. There are 1 table and 8 Soviet-bloc references. ✓

ASSOCIATION: Institut fiziologiy im. O.O. Bogomoltsya, institut organichnoyi khimiyi AN URSR (Institute of Physiology im. O.O. Bogomolets, Institute of Organic Chemistry AS UkrSSR)

SUBMITTED: July 15, 1960

Card 4/4



DINZBURG, R.N., kand. tekhn. nauk; SAPPAY, B.A., kand. tekhn. nauk;  
BARAMBOIN, N.K., doktor khim. nauk

Studies in the field of the use of condensation resins in  
rubber goods. Report No.3: Effect of the structure of phenol  
resins on the strengthening of butadiene-styrene rubber with  
the thermosetting method of rubber-resin master batches.  
Nauch.-issl. trudy VNIIPK no.14:3-10 '63.

(MIRA 18:12)

HUDOLIN, Vl.; PRAZIC, B.; MUACEVIC, V.; BARAC, B.

Social problems in transvestitism. Neuropsihijatrija 9 no.1:54-62  
'61.

1. Iz Neurolesko-psihijatrijskog odjela Opce bolnice "Dr. M. Stojanovica",  
Zagreb (Sef: Dr. Vladimir Hudolin).

(SEX DEVIATION)

BARAC, B.; IVACIC-BOHACEK, V.; NOVAK, Z.

On the diagnosis of internal carotid thrombosis. Neuropsychiatria  
11 no.2:163-168 '63.

1. Iz Neurolosko-psihijatrijske klinike Med. fakulteta u Zagrebu  
(Predstojnik: Prof. dr. R. Lopasic).

HAMEL-FUCKARIC, Nada; VURDELJA, Bosiljka; BARAC, B.

Epileptic manifestations in acute entoxone poisoning. Arh. hig.  
rada 15 no.2:195-203 '64.

1. Klinika za zivcane i dusevne bolesti i Interna klinika Medi-  
cinskog fakulteta Sveucilista u Zagrebu.

BARAC, I.

RUMANIA/Farm Animals. Honeybees

Q-6

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50118

Author : Foti, N., ~~Barac, I.~~, Copaitici, M., Bolcas, A., Alexandru V.,  
Tolmacevski A., Peti I.

Inst : -

Title : Experimental Data Regarding Temporary Colonies Organized  
with Queens which Hibernated Outside of Winter Quarters

Orig Pub : Apicultura, 1957, No 6, 4-9

Abstract : The method of using auxiliary queens (AQ) during productive years resulted in a 35-130 percent increase of honey being collected in Rumania. In unproductive years, the increase amounted only to 12-18 percent, for a considerable part of honey crops had to be spent for bee colonies for the period of their hibernating with AQ. A new method of hibernating of queens outside of winter-quarters is proposed. During spring, one or more temporary colonies (TC) are organized from a strong basic colony (BC) with queens which hibernated

Card : 1/2

72

Country : RUMANIA  
 Category : Farm Animals. 2  
           The Honeybee.  
 Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96943  
 Author : Barac, I.; Bolcas, A.; Alexandru, V.  
 Institut. : -  
 Title : The Effectiveness of Migratory Apiculture.  
  
 Orig Pub. : Apicultura, 1957, No 7, 4-8  
 Abstract : During the investigations of Rumanian experimental stations in 1953-1956, the results of transferring apiaries within various distances were compared. At first, migrations proved to be unprofitable; shipping costs per 1 kg of honey from a migratory apiary exceeded the costs from a control apiary by 18 times. In 1956, after collecting 19.1 kg from acacia trees, the experimental group collected on the average 15.4 kg per colony from linden trees  
  
 Card: 1/2

Country : RUMANIA  
Category : Farm Animals. Q  
          The Honeybee.  
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96943  
  
Author :  
Institut. :  
Title :  
  
Orig Pub. :  
  
Abstract : from 23 June to 11 July, and 12.1 kg from sun-  
          flowers from 18 July to 3 August; a total of  
          46.6 kg. The control group collected 13.75 kg  
          from acacia trees and 13.4 kg from sunflowers,  
          a total of 32.15 kg, i. e., 14.15 kg less. It  
          was shown that migratory apiaries are highly  
          effective, provided blooming time and shipping  
          costs of bee colonies are properly taken into  
          account. -- V. A. Kanzyuba  
  
Card: 2/2

BARAC, Nicolae, ing.

~~Modern methods used for equipment repairs in the rubber industry.~~  
Industrial usoara 10 no.4:139-142 Ap '63.



✓  
BARAC, Nicolae, ing.

Hydrodynamics of lubrication, a factor in the prolongation  
of working duration of equipment in the rubber industry.  
Industria usoara 10 no.6:241-244 My '63.

BARAC, Nicolae, ing.

New high pressure pumping aggregates used in the rubber industry. Industria usoara 10 no.8:34=-3/8 Ag '63.

BARACEK, G.

Analysis of economic management of collective farms in 1955.

p. 3  
Vol. 10, no. 5, May 1956  
ROLNICKE HLASY  
Praha

SO: Monthly List of East European Accessions (EFAL), LC, Vol. 5, no. 12  
December 1956

BARACEK, J.

"Speed control of a direct-current motor by constant rotor-system current."

AUTOMATISACE, Praha, Czechoslovakia, Vol. 2, no. 5, May 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, No. 8,  
August 1959

Unclassified

KOPECEK, Jan, inz.; BARACEK, Jaroslav, inz.; KRATOCHVIL, Petr, promovany matematik.

Use of an automatic computer in transformer calculations.  
El tech obzor 52 no.11: 592-597 N°63.

1. Zavody V.I.Lenina Plzen, n.p.

[illegible]

Dissertation for degree of  
 Candidate Biological Sciences

Def. at  
Tbilisi State U.

1. BARACH, G. P.
2. USSR (600)
4. Salmon - Black Sea
7. Significance of the brook trout in the reproduction of the stock of Black Sea salmon (salmon trout). *Zool.zhur.* 31 no. 6, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

BARACH, G.P.; SADOVSKIY, A., red.; KHAKHMIGERY, M.D., tekhn. red.

[Inland bodies of water of the Abkhaz A.S.S.R., their commercial ichthyofauna and significance for the fish trade]  
Vnutrennie vodoemy Abkhazskoi ASSR, ikh promyshlovaia ikhtiofauna i rybokhoziaistvennoe znachenie. Sukhumi, Abgosizdat, 1960. 131 p. (MIRA 16:6)

(Abkhazia—Fisheries)



BARACH, German Pavlovich, zasl. deyatel' nauki Gruzinskoy SSR;  
SADOVSKIY, A.A., red.; YANKOSHVILI, TS.A., red. izd-va;  
BOKERIYA, N.B., tekhn. red.

[Salmon trout of the Black Sea]Chernomorskaia kumzha (losos'-  
forel'). Tbilisi, Izd-vo Akad.nauk Gruzinskoi SSR, 1962. 109 p.  
(MIRA 16:3)

(Black Sea—Trout)

BARACHEVSKIY, V.A.; KOTOV, Ye.I.; TERENIN, A.N., akademik

Spectra of molecular anthracene ions formed during vacuum  
adsorption. Dokl. AN SSSR 143 no.2:362-365 Mr '62.

(MIRA 15:3)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo  
gosudarstvennogo universiteta im. A.A.Zhdanova.

(Anthracene — Spectra)

(Adsorption)

BARACHEVSKIY, V.A.; KOTOV, Ye.I.; TERENIN, A.N., akademik

Spectral examination of the effect of steam on adsorbed  
molecular ions of anthracene. Dokl.AN SSSR 144 no.2:378-381  
My '62. (MIRA 15:5)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta.  
(Anthracene—Spectra) (Water vapors)

BARACHEVSKIY, V.A.; KHOLMOGOROV, V.Ye.; KOTOV, Ye.I.; TERENIN, A.N.,  
akademik

Absorption spectra and electron paramagnetic resonance spectra  
of positive acene ions formed in vacuum adsorption. Dokl. AN  
SSSR 147 no.5:1108-1111 D '62. (MIRA 16:2)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo  
universiteta im. A.A. Zhdanova.  
(Acenes—Spectra) (Adsorption)

BARACHEVSKIY, V.A.; KHOLMOGOROV, V.Ye.; TERENIN, A.N., akademik

Concentration effect in the absorption spectra and electron  
paramagnetic resonance of adsorbed molecular ions of anthracene.  
Dokl. AN SSSR 152 no.5:1143-1146 0 '63. (MIRA 16:12)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo  
gosudarstvennogo universiteta im. A.A.Zhdanova.

ACCESSION NR: AP4044387

S/0195/64/005/004/0630/0636

AUTHOR: Karakchlyev, L. G.; Barachevskiy, V. A.; Kholmogorov, V. Ye.

TITLE: Spectroscopic investigation of the acidity of some silicate catalysts

SOURCE: Kinetika i kataliz, v. 5, no. 4, 1964, 630-636

TOPIC TAGS: silicate, catalyst, aluminum oxide, magnesium oxide, silicon dioxide, titanium dioxide, anthracene, spectroscopy, catalyst acidity, aluminum silicate, magnesium silicate, titanium silicate, electron paramagnetic resonance, zircon

ABSTRACT: The acidity of catalysts of the type  $Al_2O_3+SiO_2$ ,  $MgO+SiO_2$  and  $TiO_2+SiO_2$  was investigated by absorption spectra and the electron paramagnetic resonance of adsorbed molecular ions of anthracene. The most intensive absorption bands and EPR signals, and hence the highest number of acid centers, were found in the systems  $Al_2O_3+SiO_2$  and  $ZrO_2+SiO_2$ . The absorption curves for anthracene adsorbed on the initial oxides and on  $Al_2O_3+SiO_2$  catalysts are plotted for comparison. The absorption band of the cation radical was at 700 m $\mu$  for anthracene molecules adsorbed on the surface of  $\gamma-Al_2O_3$ . It was found that  $MgO+SiO_2$ ,  $ZrO_2+SiO_2$  and  $Al_2O_3+SiO_2$  have both proton and aprotic acidities. In the adsorbents investigated,  $Al^{+3}$  with a coordination number of 4 was present in three compositions: 5%  $Al_2O_3+95\% SiO_2$ , 10%  $Al_2O_3+90\% SiO_2$  and 25%  $Al_2O_3+75\% SiO_2$ . The maximum acidity was observed

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ACCESSION NR: AP4044387

for compositions with a maximum content of tetracoordinated  $Al^{+3}$  and  $Mg^{+2}$ , respectively.  $ZrO_2+SiO_2$  has a maximum acidity at a composition close to the equimolecular. On the basis of the symbatic variation of the proton and aprotic acidities with catalyst composition, it can be assumed that the occurrence of acid centers is due to the same cause and is associated with the coordination of  $Al^{+3}$ ,  $Mg^{+2}$  and  $Zr^{+4}$  in the catalysts. The investigation of the anthracene absorption curves for  $TiO_2+SiO_2$  catalysts showed that if, after the adsorption of the anthracene molecules on the silicagel surface, oxygen is introduced (at 20 mm Hg) and heated in a closed system up to 100C, the temperature of adsorption of anthracene, a spectrum of brown heterogeneous oxidation products of anthracene is obtained. This shows the presence of surface atomic oxygen in  $TiO_2$ , which oxidizes the adsorbed molecules. The variation in intensity in the different spectra is due to the different concentration of acid centers on the surface of the catalysts and the nature of the interaction of the adsorbed cation radicals. "The authors thank M. S. Borisova and N. V. Akimova for supplying the catalyst samples, as well as A. N. Terenin and V. A. Dzis'ko for their exceptional attention to this investigation." Orig. art. has: 7 figures and 1 table.

ASSOCIATION: Nauchno-Issledovatel'skiy fizicheskii Institut Leningradskogo gosudarstvennogo universiteta im. A. A. Zhdanova (Scientific Research Institute of Physics, Leningrad State University); Institut kataliza SO AN SSSR (Institute  
Cord 2/3

ACCESSION NR: AP4044387

of Catalysis, SO AN SSSR)

SUBMITTED: 22Jan64

ENCL: 00

SUB CODE: IC, OP

NO REF SOV: 009

OTHER: 003

Card3/3



BARACHEVSKIY, V.A.; TERENIN, A.N.

Electron absorption spectrum of adsorbed tetrazine molecules.  
Opt. i spektr. 16 no.6:967-975 Je '64. (MIRA 17:9)

BARACHNEVSKIY, V.A.; TEREENIN, A.N.

Spectra of positive benzene ions. (opt. i spektr. 17 no.2:  
304-306 Ag'64 (MIRA 17:8)

BARACHEVSKIY, V.A.; Kholmogorov, V.Ye.; Belotserkovskiy, G.M.; Terenin, A.N.

Spectral study of the specific nature of an active  $Al_2O_3$  surface.  
Kin. i kat. 6 no.2:258-268 Mr-Ap '65. (MIRA 18:7)

1. Leningradskiy gosudarstvennyy universitet i Leningradskiy tekhnologicheskii institut imeni Lensoвета.

BARACHNYY, G.; ARISTOV, K.; MOCHALOVA, A.; KOROL'KOVA, B.; ANDREYEV, K.;  
TSITSKIYEV, S.; KUCHUMOVA, L.; IVAKHIN, I.; KURSOV, I.;  
KARAVAYEV, S.

Our readers' letters. Den. i kred. 20 no.3:69-73 Mr '62.  
(MIRA 15:3)

1. Kreditnyy inspektor Bakhchisarayskogo otdeleniya Gosbanka Krymskoy oblasti (for Barachnyy). 2. Upravlyayushchiy Krasnosel'skim otdeleniyem Gosbanka Kostromskoy oblasti (for Aristov). 3. Zamestitel' nachal'nika operatsionnogo upravleniya Moskovskoy gorodskoy kontory Gosbanka (for Mochalova). 4. Starshiy ekonomist Moskovskoy gorodskoy kontory Gosbanka (for Korol'kova). 5. Nachal'nik tekhnicheskogo otdela Moskovskoy oblastnoy kontory Gosbanka (for Andreyev). 6. Starshiy kreditnyy inspektor Sunzhenskogo otdeleniya Gosbanka Checheno-Ingushskoy ASSR (for TSitskiyev). 7. Glavnyy bukhgalter otdeleniya Gosbanka Verkhne-Chusovskiy Gorodki Permskoy oblasti (for Kuchumova). 8. Revizor Kurskoy oblastnoy kontory Gosbanka (for Ivakhin). 9. Glavnyy bukhgalter Irbit'skogo otdeleniya Gosbanka Sverdlovskoy oblasti (for Kursov). 10. Glavnyy bukhgalter Komi-Permyatskoy okruzhnoy kontory Gosbanka (for Karavayev).

(Banks and banking)

ACCESSION NR: AP4041520

Z/0065/64/000/003/0257/0288

AUTHOR: Koutsky, Jaroslav (Koutskiy, Yaroslav); Jezek, Jaroslav (Yezhek, Yaroslav); Jandos, Frantisek (Yandosh, Frantishek); Barackova, Lydie (Barachkova, Lidiya)

TITLE: The heat resistance of 12% Cr steels with tungsten, molybdenum, and vanadium

SOURCE: Kevove materialy, no. 3, 1964, 257-288

TOPIC TAGS: heat resistant chromium steel, twelve percent chromium steel, modified chromium steel, heat resistant steel

ABSTRACT: Twenty-seven heats of modified 12% Cr steel containing ~ 0.20% C, 10.82-13.09% Cr, 0.25-9.38% Mo, 1.04-15.32% W, and 0.12-1.11% V were investigated in order to determine the effect of prolonged (up to 5000 hr) aging at 550-650C on its structure and mechanical properties. The following phases were identified in the steels studied:  $M_{23}C_6$ ,  $M_6C$ ,  $V_4C$  carbides,  $M_2X$  carbonitride and intermetallic Laves phases:  $Fe_2Mo$ ,  $Fe_2W$ . Molybdenum and vanadium were found to increase the notch toughness of the tempered steels. The notch

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ACCESSION NR: AP4041520

toughness does not drop under the effect of aging unless a high content of these elements causes precipitation of the  $\text{Fe}_2\text{Mo}$  Laves phase or the  $\text{V}_4\text{C}_3$  carbide. The  $\text{Fe}_2\text{W}$  and  $\text{Fe}_2\text{Mo}$  Laves phase precipitation during aging is accompanied by an increase of tensile strength and embrittlement. The precipitation of the  $\text{V}_4\text{C}$  carbide has a similar but less pronounced effect. The  $\text{V}_4\text{C}_3$  carbide precipitates in the martensite as well as in the delta-ferrite forming fine two-dimensional particles. During aging, these particles disappear in the sorbite (originally martensite), while they grow in the delta-ferrite. The precipitation and and coagulation kinetics of the Laves phases is different; both processes proceed much slower than in the case of carbides. Orig. art. has: 24 figures, 9 tables, and 1 formula.

ASSOCIATION: Vyzkumny a zkusebni ustav LZ, Plzen (Research and Testing Institute, LZ); Vyzkumny ustav uslechtilych oceli, Prague (Research Institute of Alloy Steels)

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: MM

NO REV SOV: 008

OTHER: 032

Card 2/2

BARACS, Denes (Budapest, XIV., Szobranc koz 4)

Private subway. Auto motor 16 no.8:5 21 Ap '63.

BARACS J.

Agriculture

The October sowing of wheat is the sure basis for the crop. p. 2

Vol. 10, No. 19, Oct. 1955

"MAGYAR MEZOGAZDASAG"

Monthly List of East European Accessions (EEAI), IC, Vol. 3, No. 4, April 1959  
Unclass.



BARACS, J.

Preparations for spring in Baranya County. p. 2. (Magyar Mezőgazdaság, Vol. 11, no. 3, Feb. 1956 Budapest)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

PARACS, J.

PARACS, J. Plant cultivation in Baranya County. p. 4

Vol. 11, No. 10, May 1956

MAGYAR MEZAGAZDASAG

AGRICULTURE

Budapest

SO: EAST EUROPEAN ACCESSIONS, Vol. 6, No. 3, March 1957

BARADA, L.

BAR/DA, L. Action of exchange on the improved potato for rowing. p. 32.

Vol. 11, no. 15/16, Aug. 1956

MAGYAR MEZOGAZDASAG

AGRICULTURE

Budapest, Hungary

So: East European Accession, Vol. 6, No. 5, May 1957

BARADANOV, M.; SEMENETS, P.

Educational significance of collective forms of wage payment.  
Sots. trud 5 no.12:116-121 D '60. (MIRA 14:6)

1. Nachal'nik normativno-issledovatel'skoy laborartorii po trudu  
konservnogo zavoda imeni 1-go Maya (for Baradanov).  
(Tiraspol' —Canning industry)  
(Moscow—Bearing industry)  
(Wage payment systems)

BARADANOV, M.Ye.

Switching to the production of 20% tomato paste. Kons. 1 ov. prom.  
12 no.3:15-16 Mr '57. (MIRA 10:5)

1. Tiraspol'skiy konservnyy zavod imeni 1 Maya.  
(Tomatoes)

BARADANOV K. I.

Give serious consideration to the problems of mechanization. Kons.  
i ov. prom. 13 no.3:37-39 Mr '58. (MIRA 11:4)

1. Tiraspol'skiy konservnyy zavod imeni 1 Maya.  
(Moldavia--Canning industry)

BARADANOV, M.Ye.

Mechanization and automatic control of Moldavian canning factories.  
Kons. i ov. prom. 14 no.9:3-4 S '59. (MIRA 12:12)

1.Sovnarkhoz Moldavskoy SSR.  
(Moldavia--Canning industry--Equipment and supplies)  
(Automatic control)

BARADANOV, M.Ye.

"First of May" Tiraspol' Cannery is getting ready for the change-over to a shorter workday. Kons.i ov. prom. 15 no.6:38 Je '60.  
(MIRA 13:9)

1. Tiraspol'skiy konservnyy zavod imeni 1 Maya.  
(Tiraspol'---Canning industry) (Hours of labor)



BARADANOV, M.Ye.

Experience in organizing the management and work of composite crews.  
Kons.1 ov.prom. 15 no.8:34-35 Ag '60. (MIRA 13:8)

1. Tiraspol'skiy konservnyy zavod im. 1 Maya.  
(Tiraspol'---Canning industry)

BARADAN'YANTS, V. G. (Engr.)

"Technology of Copper-alloy Casting in Plaster ~~Molds~~.<sup>Polin</sup> book Shaped Casting of Copper, Collection of Articles, Moscow, Mashgiz, 1957, 205pp.

book contains papers presented at a scientific and technical convention, Moscow, Dec, '55, on shaped-copper alloy casting.

This method of casting is said to be useful only when a small number of castings are to be produced or when design changes are frequent but good dimensional accuracy with high surface quality is desirable. The author describes the accepted procedure of copper-alloy casting in plaster-of-paris molds, from the preparation of plaster and mold-making to the cleaning of the finished castings. There are numerous illustrations depicting the various stages of the process. Experiments conducted by VNIIZhelezobeton (All-Union State Sci. Res. Inst. for Reinforced-concrete Parts and Structures and VIAM (All-Union Sci. Res. Inst. of Aviation Materials) are reported to have shown that the permeability of plaster molds to gases may be increased by steaming them prior to baking, which also results in coarser grain, less warping and reduced shrinkage.

BARADAN'YANTS, V.G., inzhener.

Properties of copper alloy castings made with use of cast patterns.  
Lit. proizv. no.5:10-12 My '57. (MLRA 10:6)  
(Copper alloys) (Founding)

BARADAN'YANTS, V.G.

PHASE I BOOK EXPLOITATION

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Moskovskiy dom nauchno-tekhnicheskoy propagandy im. F. E. Dzerzhinskogo

Metody polucheniya otlivok povyshennoy tochnosti (Methods of Making High-Precision Castings), Moscow, Mashgiz, 1958. 140 p. 4,500 copies printed.

Additional Sponsoring Agency: Obshchestvo po rasprostraneniye politicheskikh i nauchnykh znaniy RSFSR

Ed.: Yevseyev, A.S., Engineer; Ed. of Publishing House: Stepanchenko, N.S.; Tech. Ed.: Uvarova, A.F.; Managing Ed. for literature on heavy machine building (Mashgiz): Golovin, S.Ya., Engineer.

PURPOSE: This book is intended for engineers and technicians at plants and institutes, as well as in research and planning organizations in all branches of the machine-building industry.

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